The Claims:

We claim:

1. A universal junction box for controlling the operations of an adjustable bed comprising:

microprocessor and control logic for driving a plurality of motors based on received command signals to adjust a position of the adjustable bed; and

a universal power supply for receiving power from a source and converting the power to appropriate voltage levels to power the microprocessor and control logic and motors, wherein the universal power supply has automatic sensing for sensing the voltage of the source.

2. The universal junction box according to claim 1, wherein the universal power supply accepts voltages from the source between approximately 90 V and 260 V.

3. The universal junction box according to claim 1, further comprising:

connection means for connecting two universal junction boxes together so that the two universal junction boxes operate in a master/slave configuration.

4. The universal junction box according to claim 1, further comprising:

a flash memory for receiving and storing operational software for said universal junction box from an external source.

5. The universal junction box according to claim 1, further comprising:

connection means for connecting the universal junction box to at least one detection system mounted on a frame for said bed for detecting the presence of a human or animal inside said frame.

6. The universal junction box according to claim 5, wherein at least two detection systems are mounted on the frame, at least one at each end of the frame.

7. The universal junction box according to claim 5, wherein the detection system comprise a pyroelectric sensor and a light source with a frensel lens.

8. The universal junction box according to claim 7, wherein the detection system further comprises an enclosure for limiting the visibility of the sensor in the vertical plane.

9. The universal junction box according to claim 5, wherein the detection system detects the presence of a human or animal by detecting an ambient temperature change inside the enclosed frame.

10. A universal junction box for controlling the operations of an adjustable bed, comprising:

microprocessor and control logic for driving a plurality of motors based on received command signals; and

a programmable RF receiver for receiving command signals from a remote control, wherein the RF receiver recognizes any remote operating in a predetermined frequency range.

11. The universal junction box according to claim 10, wherein the frequency range is between 418 MHz and 433 MHz.

12. The universal junction box according to claim 10, wherein the universal junction box determines the operating frequency of a remote when a button on the remote is activated.

13. The universal junction box according to claim 10, further comprising:

connection means for connecting two universal junction boxes together so that the two universal junction boxes operate in a master/slave configuration.

14. The universal junction box according to claim 10, further comprising;

a flash memory for receiving and storing operational software for said universal junction box from an external source.

15. The universal junction box according to claim 10, further comprising:

connection means for connecting the universal junction box to at least one detection system mounted on a frame for said bed for detecting the presence of a human or animal inside said frame.

16. The universal junction box according to claim 15, wherein at least two detection systems are mounted on the frame, at least one at each end of the frame.

17. The universal junction box according to claim 15, wherein the detection system comprise a pyroelectric sensor and a light source with a frensel lens.

18. The universal junction box according to claim 17, wherein the detection system further comprises an enclosure for limiting the visibility of the sensor in the vertical plane.

19. The universal junction box according to claim 15, wherein the detection system detects the presence of a human or animal by detecting an ambient temperature change inside the enclosed frame.

20. An adjustable bed, comprising:

an adjustable mattress;

an actuator for adjusting the position of the mattress;

an enclosed bed frame for supporting the adjustable mattress; and

a detection system for detecting the presence of a human or animal inside the enclosed bed frame.

21. The adjustable bed according to claim 20, wherein at least two detection systems are mounted on the frame, at least one at each end of the frame.

22. The adjustable bed according to claim 20, wherein the detection system comprise a pyroelectric sensor and a light source with a frensel lens.

23. The adjustable bed according to claim 22, wherein the detection system further comprises an enclosure for limiting the visibility of the sensor in the vertical plane.

24. The adjustable bed according to claim 20, wherein the detection system detects the presence of a human or animal by detecting an ambient temperature change inside the enclosed frame.